

RELAY SPECIFICATION

继电器规格书

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Product Description (品名)	OJ-SH-112LMH,000
Part Number (泰科编码)	9-1419128-8
Customer (客户)	-

REFERENCE ONLY NOT FOR FORMAL RELEASE

SAFETY STANDARD 安全标准

UL certificate	E82292
UL 证书	
TUV certificate	R 50036161
TUV 证书	
VDE certificate	1146900-4940-0003
VDE 证书	
CSA certificate	1290802 (LR 48471-43)
CSA 证书	

COIL CHARACTERISTICS 线圈特性

Coil resistance	720±10% Ω
线圈电阻	
Rated voltage	12VDC
额定电压	
Max. allowable voltage	15.6VDC
最大允许电压	
Rated power	200mW
额定功率	
Operate voltage	≤9VDC
吸合电压	
Release voltage	≥1.2VDC
释放电压	

CONTACT RATINGS 触点规格

Contact configuration	1 Form A (SPST-NO)
触点结构	
Contact material	AgCdO
触点材料	
Initial contact resistance	≤100 mΩ at 6VDC/1A
初始接触电阻	
Rated switching voltage (Normally Open)	250VAC/30VDC
额定切换电压 (常开触点)	
Rated switching voltage (Normally Close)	-
额定切换电压 (常闭触点)	
Rated current (Normally Open)	8A
额定电流 (常开触点)	
Rated current (Normally Close)	-
额定电流 (常闭触点)	
Rated switching power (Normally Open)	2000VA/240W
额定切换功率 (常开触点)	

Rated switching power (Normally Close) 额定切换功率 (常闭触点)	-
Minimum applicable load (Normally Open) 最小使用负载 (常开触点)	5VDC 100mA
Minimum applicable load (Normally Close) 最小使用负载 (常闭触点)	-
Operate time 吸合时间	≤15ms, excluding bounce time ≤15ms, 不含触点抖动时间
Release time 释放时间	≤4ms, excluding bounce time ≤4ms, 不含触点抖动时间
Mechanical endurance 机械寿命	10 Million cycles, 300 cycles/minute
Electrical endurance (resistive load) 电气寿命	8A, 250VAC, 100k cycles, 10cycles/minute 8A, 30VDC, 100k cycles, 10cycles/minute
INSULATION PERFORMANCE 绝缘性能	
Dielectric strength 介电强度	750VAC 1minute, between open contacts 750VAC 1 分钟 (断开触点间) 4000VAC 1minute, between coil to contacts 4000VAC 1 分钟 (线圈与触点间)
Impulse withstand voltage 耐浪涌电压	10 KV (1.2/50 μ s), between coil to contacts 10 KV (线圈与触点间)
Insulation resistance 绝缘电阻	1000MΩ at 500VDC, between open contacts and coil to contacts 1000MΩ (断开触点间及线圈与触点间)
Insulation systems (UL) 绝缘系统	Class A (105)
Insulation type 绝缘类型	Basic insulation 基本绝缘
ENVIRONMENT PERFORMANCE 环境性能	
Category of protection (IEC61810-1) 密封类型	RT III (Wash tight) 防水
Operating temperature 工作温度	-30~85°C
Operating humidity 工作湿度	20~85%RH
Storage temperature 储藏温度	-30~85°C
Storage humidity 储藏湿度	20~85%RH

Vibration resistance

耐振动

(1) Capability to function during vibration

No opening or closing of any closed or opened contact circuit respectively exceed 1ms when the relay is subjected to vibration of 10~55Hz and 1.5mm dual amplitude in each of three mutually perpendicular axes for 10 minutes respectively, while it is in operate condition and in release condition.

抗误动作能力

动作/释放状态下，继电器在三个轴向耐受频率10~55Hz及振幅1.5mm的振动各10分钟，触点误动作不超过1毫秒。

(2) Capability to function after vibration

No trouble on structure and characteristics after the relay is subjected to vibration of 10~55Hz and 1.5mm dual amplitude in each of three mutually perpendicular axes for 2 hours respectively.

振动耐久能力

继电器在三个轴向耐受振幅1.5mm及频率10~55Hz的振动各2小时，产品构造和性能无异常发生。

Shock resistance

耐冲击

(1) Capability to function during shock

No opening or closing of any closed or opened contact circuit respectively exceed 1ms when the relay is subjected to shock of 98.1m/s^2 for 11ms in both directions of each of three mutually perpendicular axes for 3 times respectively, while it is in operate condition and in release condition.

抗误动作能力

动作/释放状态下，继电器在三轴六方向耐受加速度 98.1m/s^2 及作用时间11毫秒的冲击各3次，触点误动作不超过1毫秒。

(2) Capability to function after shock

No trouble on structure and characteristics after the relay is subjected to shock of 981m/s^2 for 6ms in both directions of each of three mutually perpendicular axes for 3 times respectively.

冲击耐久能力

继电器在三轴六方向耐受加速度 981m/s^2 及作用时间6

Cold resistance 耐低温	毫秒的冲击各3次，产品构造和性能无异常发生。 No trouble on structure and characteristics after placed at -40°C for 240 hours and 2 hours recovery in standard atmospheric conditions. -40°C 中放置240小时并在标准大气条件中恢复2小时后继电器构造和特性无异常。
Thermal resistance 耐高温	No trouble on structure and characteristics after placed at 85°C for 240 hours and 2 hours recovery in standard atmospheric conditions. 85°C 中放置 240 小时并在标准大气条件中恢复 2 小时后继电器构造和特性无异常。
Humidity resistance 耐湿度	No trouble on structure and characteristics after placed at $40^{\circ}\text{C}\&95\%\text{RH}$ for 240 hours and 2 hours recovery in standard atmospheric conditions. 40°C 及95%相对湿度中放置240小时并在标准大气条件中恢复2小时后继电器构造和特性无异常。
Thermal shock resistance 耐冷热冲击	No trouble on structure and characteristics after endure 100 cycles of cyclic temperature and 2 hours recovery in standard atmospheric conditions, which the temperature cycle consists of -40°C for 0.5 hour and 85°C for 0.5 hour. -40°C 和 85°C 中各放置0.5小时为一个温度周期，循环100次，在标准大气条件中恢复2小时后继电器构造和特性无异常。
Terminal robustness 引出端强度	No trouble on structure and characteristics after endure axial pushing/pulling force of 5N for 10 seconds. 继电器引出端承受 5 牛顿的轴向压入、拨出力，延时 10 秒，构造和性能无异常。
MARKING 产品标识	
Position of marking 标识位置	Side of relay cover 外壳侧面
Cover color 外壳颜色	Blue 蓝色
Ink color 字体颜色	White 白色

Agency approval mark

UL, TUV, VDE, CSA

安规机构标识

Trade mark

OEG

商标

MOUNTING INFORMANTION 安装信息

Solderability

260±5°C for 5±0.5 seconds

可焊性

Resistance to soldering heat

260±5°C for 10±1 seconds

耐焊接热

350±10°C for 3.5±0.5 seconds

Standard direction

Relay PCB terminals downward

标准方向

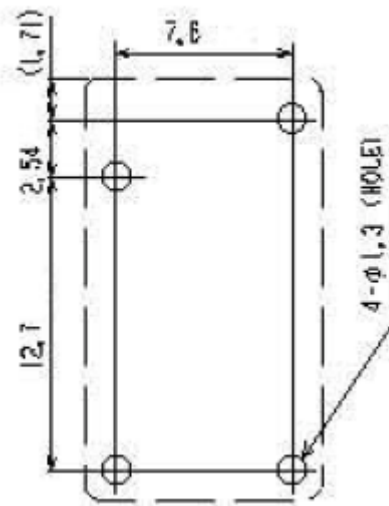
继电器 PCB 型引出端朝下

Terminals assignment (PCB layout)

Refer to below drawing

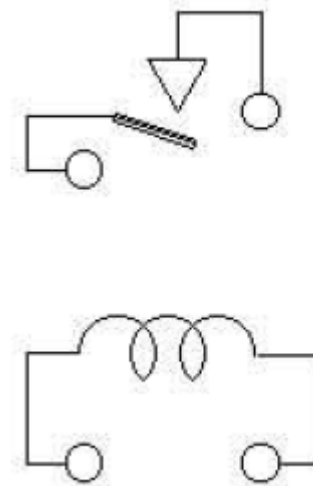
引出端脚位

请参考下图



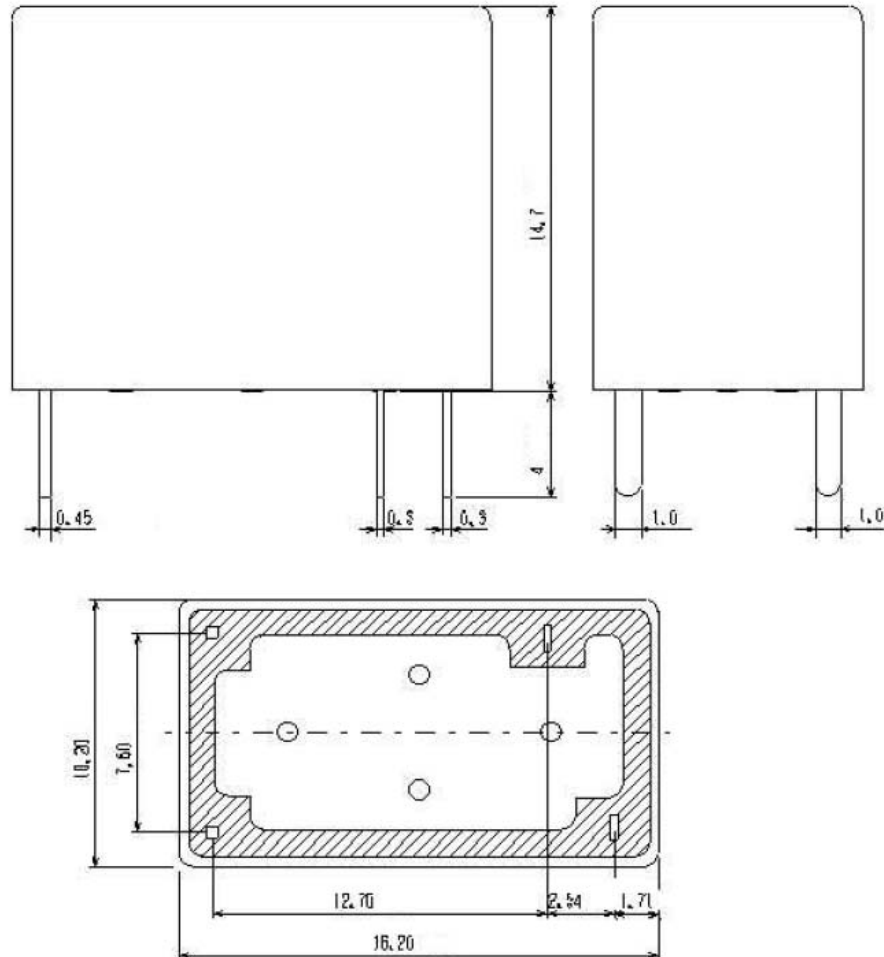
Relay outline dimensions (mm)

继电器外形尺寸



Refer to below drawing

请参考下图



ENGINEERING NOTES 注意事项

Unless otherwise explicitly stated, the standard environment conditions for measurement or testing are listed as followings:

除非特别申明，测量或试验的标准环境条件如下：

- (1) Ambient temperature is $23\pm 5^{\circ}\text{C}$;
环境温度为 $23\pm 5^{\circ}\text{C}$;
- (2) Atmospheric pressure is $96\pm 10\%$ kPa;
大气压力为 $96\pm 10\%$ kPa;
- (3) Relative humidity is $50\pm 25\%$ RH.
相对湿度为 $50\pm 25\%$ RH.

About wash tight (completely sealed) relay with a vent provision, then vent should be opened after soldering and cleaning, the listed electrical endurance ratings assume that the relay is ventilated.

在使用敝司完全封闭型继电器时，请在焊锡和清洗工序之后，打开继电器上的通气孔，方可以达到本规格书中所保证的电气寿命。